Application No.: 10/537,182
Office Action Dated: November 2

Office Action Dated: November 23, 2009 Reply to Office Action Dated: April 15, 2010

## REMARKS

Claims 14-17, 19-29, and 31 are pending in the present application. Claim 14 has been amended to focus the scope of the claims to polymers containing the recited comonomers in the backbone of the polymer. The amendment to claim 19 is purely a formality.

Reexamination of the application and reconsideration of the rejections and objections are respectfully requested in view of the above amendments and the following remarks, which follow the order set forth in the Office Action.

## Rejections under 35 U.S.C. § 103

The Office Action maintains the rejection of claims 14-17, 19-29, and 31 under 35 U.S.C. §103(a) as being obvious over Morschhäuser et al. (US 6,964,995) ("Morschhäuser") in view of Narayanan et al. (WO 99/37285) ("Narayanan"). Applicants traverse the rejection.

In a reply to a previous Office Action, Applicants argued that the polymers disclosed and claimed in the present application were structurally different from the polymers taught by combination of the references because the later polymers are grafted onto an additive polymer whereas the claimed copolymers are not. In response to Applicant's argument, the Office Action asserted

the references fail to show certain features of applicant's invention, it is noted that the features upon which the applicant relies (i.e., specific structural difference when compared to Morschhäuser et al.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims

Office Action, page 6. To expedite the prosecution of the application, Applicants have amended independent claim 14 such that the distinguishing features that the Examiner referred to are recited in the claims. Specifically, claim 14 recites that copolymers of N-vinylamide monomer, ester of an ethylenically unsaturated carboxylic acid monomer, and the additional co-monomer (i.e., (meth)acrylamide, (meth)acrylonitrile, alkyl (meth)acrylates or alkyl vinyl ethers) form the backbone of the N-vinylamide-based copolymer. Conversely, Morschhäuser in combination with Narayanan discloses co-monomers grafted onto a polymeric additive having reactive sites. Thus, unlike the copolymers recited in amended claim 14, the copolymers taught by Morschhäuser in combination with Narayanan form side chains on the polymeric additive. Moreover, amended claim 14 uses the transitional term

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"composed of" and thus cannot contain a polymeric additive on which the copolymers are grafted as required by Morschhäuser in combination with Narayanan.

Furthermore, amended claim 14 recites a copolymer composed of monomer of N-vinylamide, monomer of an ester of an ethylenically unsaturated carboxylic acid, and an additional co-monomer selected from the group consisting of (meth)acrylamide, (meth)acrylonitrile, alkyl (meth)acrylates and alkyl vinyl ethers. As such, amended claim 14 does not cover N-vinylamide copolymers that comprise acryloyldimethyltaurine or acryloyldimethyltaurate. Conversely, Morschhäuser copolymers require the presence of acryloyldimethyltaurine and/or acryloyldimethyltaurate. See, paragraphs [0008]-[0019] of Morschhäuser. Therefore, Morschhäuser in combination with Narayanan cannot render obvious a copolymer that does not contain the mandatory ingredients in Morschhäuser, i.e., acryloyldimethyltaurine and/or acryloyldimethyltaurate. Id.

Moreover, amended claim 14 requires that N-vinylamide monomer and the ester of the ethylenically unsaturated carboxylic acid monomer make up at least 90 weight% of the N-vinylamide-based copolymer. Conversely, the preferred embodiment of Morschhäuser requires 50-98 weight% acryloyldimethyltaurine and/or acryloyldimethyltaurate. *See*, paragraph [0023]. As such, Morschhäuser directs the skilled artisan to use predominantly acryloyldimethyltaurine and/or acryloyldimethyltaurate, as opposed to any of the other disclosed co-monomers. Based on the foregoing, the combination of Morschhäuser and Narayanan does not render the composition of claim 14 obvious. Applicants therefore respectfully request withdrawal of the rejection.

Claims 15-17, 19-29, and 31 depend from claim 14. As such, for the same reasons discussed above for claim 14, claims 15-17, 19-29, and 31 are also unobvious over Morschhäuser in combination Narayanan. Applicants therefore respectfully request that the rejection thereof be withdrawn.

For the foregoing reasons, claims 14-17, 19-29, and 31 are considered to be allowable. A Notice to this effect is respectfully requested. If any questions remain, the Examiner is invited to contact the undersigned at the number given below.

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The Director is hereby authorized to charge any appropriate fees that may be

required by this paper, and to credit any overpayment, to Deposit Account No. 23-1925.

Respectfully submitted,

**BRINKS HOFER GILSON & LIONE** 

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Allyn B. Rhodes

Registration No. 56,745

2801 Slater Road, Suite 120 Morrisville, NC 27560-8477

Phone: 919.481.1111

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